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LAKE REGION NURSERY & FARMS CO.
WINTER HAVEN, FLA.

Catalog and Hand Book of Valuable Information to Growers

CATALOGUE

Lake Region Nursery and Farms Company

(Incorporated)

Capital \$500,000

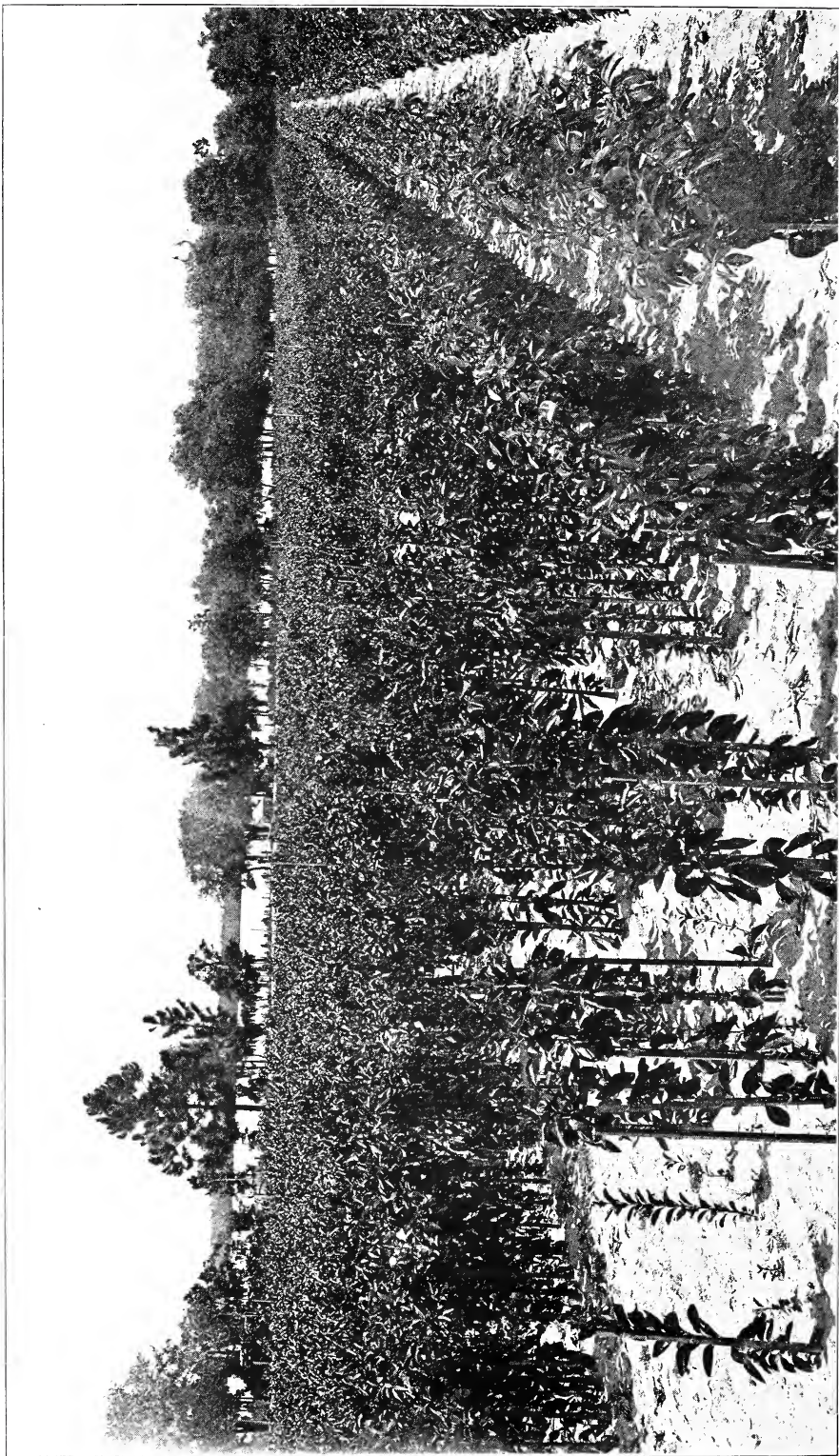


J. D. PORTER

President



ATLANTIC COAST LINE RAILROAD



Part of Nursery owned by the Lake Region Nursery and Farms Company

TERMS AND CONDITIONS OF SALE

READ CAREFULLY BEFORE ORDERING

Prices and discounts named in this catalogue will apply only under these Terms and Conditions of Sale, which are the same as used by all nurseries selling at f. o. b. prices.

PRICES IN THIS CATALOGUE are for the trees and plants at the nursery or f. o. b. (free on board cars) at the nursery shipping point, from which our supply enables us to make shipment.

TRANSPORTATION AT PURCHASER'S RISK AND EXPENSE. All transportation charges, on trees at prices named in this catalogue, to be paid by the purchaser, our responsibility ceasing upon delivery in good order to forwarding companies; all claims for delay, loss or damage must be made upon the transportation companies.

TERMS OF PAYMENT: CASH IN ADVANCE OF SHIPMENT. Orders for trees at prices named in this catalogue must be paid in full before shipment of goods. Orders booked some time in advance of shipment should be accompanied by 25 per cent of amount of order to insure us in booking the order and reserving the trees and plants. Balance to be remitted at opening of shipping season. We do not care to ship c. o. d.

WE GUARANTEE all stock to be well rooted, well grown, True to Name, properly packed, and shipped according to instructions. It is mutually agreed between the purchaser and ourselves that our liability under the foregoing guarantee is limited in amount to the original price received. No guarantee, expressed or implied, that trees will live or grow.

SUBSTITUTION. When out of varieties or sizes ordered, we substitute, unless instructed to the contrary, always giving the purchaser the benefit of our best judgment in so doing. In all cases we will cheerfully refund money instead of substituting, if so desired.

MINIMUM ORDERS at prices and terms of this catalogue. We do not care to fill orders for less amount than \$5.00.

INTRODUCTION

IT IS ALWAYS a matter of interest to know something of the man with whom one deals. We therefore give a short sketch of the man who is head and front of this institution, Mr. J. D. Porter. The elder Mr. Porter came from Iowa in 1887 and settled at Homeland, Fla. Here he purchased 20 acres of land and set out an orange grove. In the growing of this grove young J. D. became much interested in citrus fruit and gathered much knowledge that was of value in later years.

The town of Winter Haven was growing in importance and Mr. J. D. Porter invested in land near here, and this proved so profitable that he later bought a tract near the south edge of town, and here in 1911 he established his Lake Region Nursery.

His early training in the orange grove at Homeland was of great value in the citrus nursery business, and that his training was along the right lines is proven by the steady growth of the business. One of the cardinal principles on which he works this nursery is that all stock is grown right in the nursery from seed, insuring absolutely healthy stock. The importance of this will be apparent to those well informed on the growing of citrus trees.

In 1911 Mr. Porter saw the need of more and better business buildings in Winter Haven and built the Porter Building—a two-story brick structure with a frontage of 117 feet. All this time Mr. Porter bought and sold considerable property, both farm lands and city property, and that his judgment was keen is proven by his profitable dealings.

In 1912 he bought the controlling interest in what is now the First State Bank. Capital stock \$35,000. The business of this bank is steadily growing and it is a very popular institution.

The fact that Polk County lands close to transportation were rapidly being taken up, induced Mr. Porter to secure the last large tract awaiting development, that is near Winter Haven, and he traded the Porter Building for 4550 acres of land lying three miles west of town and one mile west of Auburndale. This land is incorporated with the nursery in the Lake Region Nursery and Farms Company. That this was a particularly fortunate acquisition is shown by close inspection of the land, and further evidence of Mr. Porter's judgment of land values.

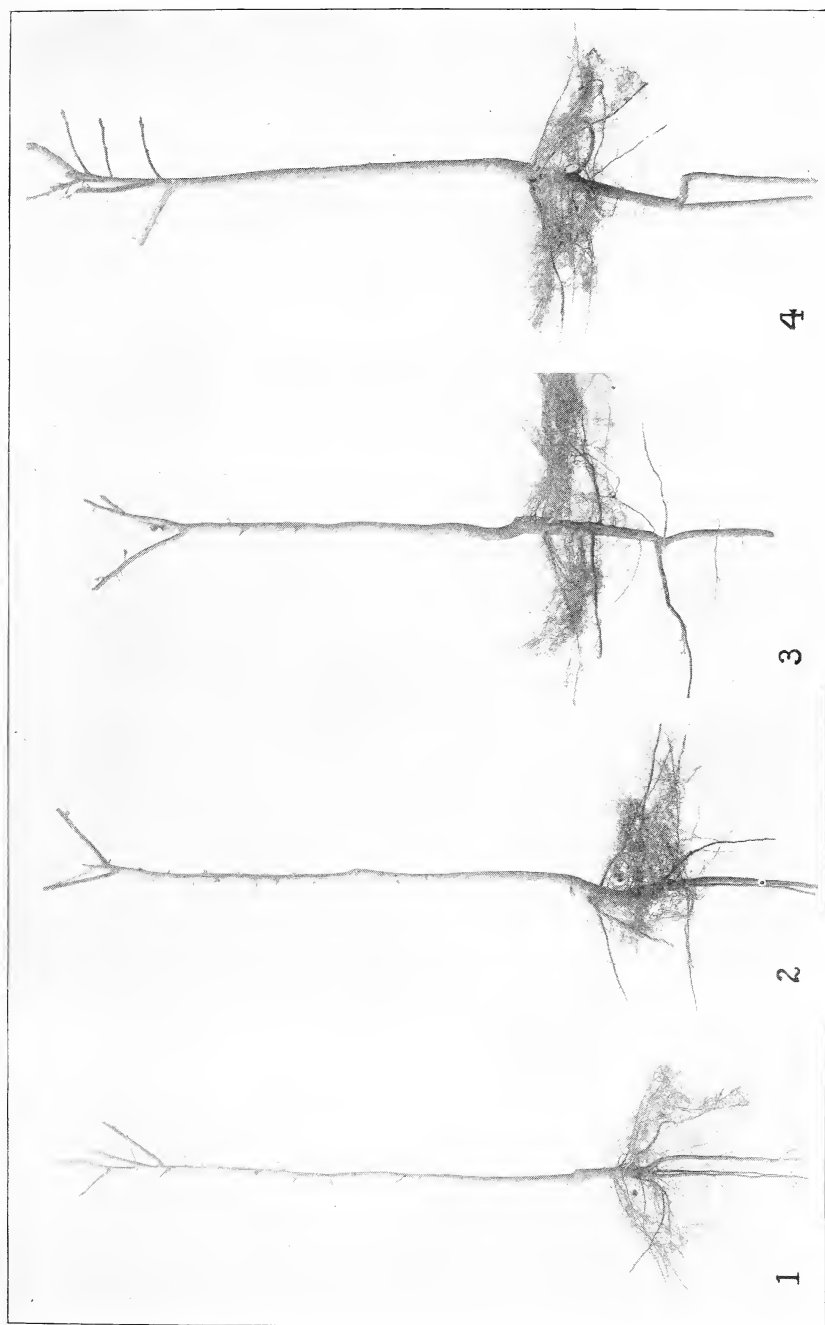
Mr. Porter is yet on the sunny side of middle life. A man who loves his home and spends his spare time with his family and his books. His dealings with his fellow man have always been characterized by fairness and strict integrity; always takes a lively interest in civic matters, and is the type of citizen who helps build a prosperous community. Mr. Porter is calm and deliberate, and never excited; quick to see the business end of a deal, and you will find that common sense is the basis of all his decisions. He can bring more points of interest to bear on a proposition in a minute than most people can in an hour's deliberation.

With it all he has a lot of fun as he goes along. You cannot converse with Mr. Porter very long before somewhere a laugh comes in and you leave feeling better and that you have met a man of his word.

His idea in taking on this big tract of land, more than any one thing else, is to have something doing. To make thriving groves and gardens grow where the virgin forest now stands; to advance the community while making a profit from his holdings. Never the grasping idea, but always the helpful and the thing that tends to uplift.

Like all men who have made a success, he has associated himself with successful people. He is always willing to see the other fellow make a profit, on the theory that one man's success is just that much towards a successful community; that when one man or firm fails, that failure is just an added burden on the whole financial community.

With a steady growth uphill, with unquestioned standing in his community, keen judgment and eminent fairness in his dealings, there is nothing over-sanguine in the expectation of his ideals being more than fulfilled, because they are founded on humanity and that rare possession known as common sense.



EXPLANATION OF ROOT SYSTEM.—Cut No. 1, $\frac{1}{2}$ in caliper; No. 2, $\frac{3}{8}$ in.; No. 3, $\frac{3}{4}$ in.; No. 4, 1 in.

Note that all are about the same height, defoliated ready for shipment; note also the sturdy growth and healthy root system. In shipping, roots are well packed in damp earth. Care must be used that roots are well protected until planted.

LAKE REGION NURSERY AND FARMS COMPANY

YOUR SUCCESS

Much of the success of your grove depends on the nursery which grew the stock. Trees should be grown without being dwarfed or stunted at any time during their propagation. All stock of the LAKE REGION NURSERY AND FARMS COMPANY is grown under the general supervision of Mr. J. D. Porter, who founded the nursery, and who has had twenty years' experience in growing citrus fruits; and under the daily supervision of our foreman, who has had twenty-five years' experience with one of the largest citrus nurseries in America.

Stock is grown under irrigation and the most modern scientific methods. Nothing is left to chance. Irrigation insures a steady growth from the time the seed sprouts to the time of making shipment, and the trees leave the nursery in a healthy, thriving condition, and strictly true to name.

Bear in mind, if you please, that all our stock is grown by us in our nursery from seed, which insures a healthy root stock.

Extreme care is used in shipping to see that all stock is well packed, and in such manner as will retain its vitality.

Follow carefully directions for unpacking and setting, and you will find our trees will continue their growth without a perceptible check.

PLANTING TREES

A tree is a thing of life. A nurseryman labors with his trees and nurses them from mere sprouts to a growing tree. To see them abused is something that wrings his heart when he has bestowed on them so much labor that to him has been a labor of love. Trees are like most anything with life in it—they require food and water. The first thing to do when you get your shipment is to see that the roots are never exposed to the air, as they dry out and lose vitality very quickly when the packing is removed from them. If ground is not ready and trees have to be held more than a day or so, better bury them in the ground until ready to plant. When they leave the nursery they are packed thoroughly and the roots will keep moist for days. In removing the trees from the ground or packing, see that the sun does not dry them out or they are not exposed to the cold air. If trees are held in packing cases over a day or two see that they are stored in a cool, dry place.

The hole should be large enough to permit spreading the roots. Sift in good rich top soil around the roots, and separate each layer as you go along. When you have finished leave a rim around the tree by banking the earth in saucer shape, forming a kind of cup as it were, and leave the crown roots sloping well downward. Pour at least half a bucket of water in hole and let settle, then cover with earth, mixing half a pound of fertilizer well with the earth covering roots. Trees should be set as near the same depth as in nursery as is possible, or a shade higher, being careful to see they are set no deeper. Trees should be set 20 by 30 or 25 by 25 or 25 by 30 feet, as may seem best or as desired.

In fertilizing do not economize on the cost, as nothing but the best is good enough for Lake Region Nursery trees, and this will be found to be economy in years to come. Winter planted trees should not be fertilized until growth starts. See that no fertilizer is used on the ground for a month to six weeks before planting.

LAKE REGION NURSERY AND FARMS COMPANY



Correct manner of planting, Lake Region Nursery and Farms Company

After the trees are in the ground they should have plenty of water, and as soon as growth starts, then a little plant food. It will be found that about the middle of February they will take on a little growth, at which time they should have about one pound of good commercial fertilizer. In 60 or 90 days later apply one pound. September 15 to 30 apply one pound of fertilizer.

Keep young groves clear of weeds and grass around the trees, as they take the plant food that the young trees must have, and unless carefully watched they will smother the trees, as they have often been allowed to do. The ground around the trees should be kept loose.

Trees from LAKE REGION NURSERY AND FARMS COMPANY will be found clean and vigorous, and free of all pests, hence by careful watching you will have little or no trouble to keep them clean, if you will keep them well sprayed.

Now, when you see your trees putting forth good growth do not take it for granted they will take care of themselves, for they will not. Care for them right along, one year with another, and they will work for you just in the proportion that you tend them. Remember they are things of life and need to be petted and fed.

ORANGES

In the growing of citrus fruit it is always well to be guided by your neighbors who have made a success. Your community may have soil characteristics all its own, and it is more than likely your neighbors have found this out. You can get valuable information by inquiry and observation. As a general thing, land that is heavy, low and moist should be planted with stock budded on sour orange and grapefruit. On high lands that are dry, rough lemon should be used.



Inserting the bud. Look closely at the stocky budwood used



Wrapping the bud

Lake Region Nursery and Farms Company

LAKE REGION NURSERY AND FARMS COMPANY

It is always best to give what information you can concerning the land you wish to set to grove, as in this way we can give you information that will save you a lot of grief and money. The experienced citrus nurseryman is well informed on the matter of certain combinations of soil and nursery stock, and it will be economy on your part to impart all the information you can when ordering.

We strongly advise growing only standard varieties, and either an early or a late one.

PARSON BROWN.—No orange raised in Florida is more popular than the Parson Brown. It keeps well and ships well, fine of texture and a most pleasant flavor. It is the early orange, ripening in October. It ripens while still retaining its green color and for this reason has been confused with green fruit by those who do not know it. It is medium to good size, slightly oblong, is very juicy and heavy. It is unquestionably the best of the early oranges.

HART'S LATE.—Slightly oval, medium size and smooth. Solid and heavy with firm flesh, and of fine quality; peel of very light color and has few seeds. This tree is a strong grower and spreads considerably; is a prolific producer. Hangs on tree until midsummer. Ripens in April.

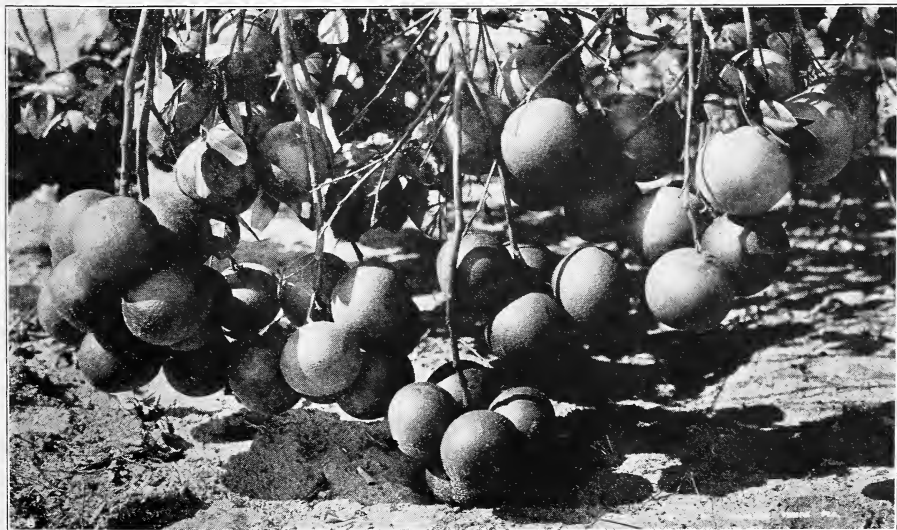
JAFFA.—Medium to large with thin peel. Rich, juicy pulp with an exquisite flavor. This orange is of very superior quality and a favorite with citrus fruit experts. It hangs on tree for a long time and retains its fine flavor. After maturity tree bears heavily. Is strong grower and a very fine fruit.

KING.—A very popular orange in Florida. Highly flavored and with a peculiarly rich, juicy pulp in segments, the skin adhering loosely, it seems to meet a very popular demand. Skin tough, but of fine general appearance. Has few seeds. Tree is very thorny, strong grower. Ripens in March, April and May. Keeps well on tree.

MANDARIN.—Medium size and somewhat flattened. Skin thin; segments rather loose. Rich, dark orange yellow and very highly flavored. In some sections the Mandarin is still a favorite.

PINEAPPLE.—Here is one of the great favorites, and of late years it has attained a very prominent place in the markets. The tree is a prolific bearer and strong grower. Medium to large, peel very thin, smooth and tough, bright in appearance and of very fine quality. One of the most profitable for extensive planting.

TANGERINE.—Belongs to the "kid glove" family. Skin separates easily from the flesh. Small to medium, and flat. Juicy and very rich in flavor.



Excelsior Grapefruit

LAKE REGION NURSERY AND FARMS COMPANY

Flesh deep red. Becoming a very popular fruit in all the markets. December, January and February.

VALENCIA LATE.—The most popular of the late varieties. It is of fine quality and its lateness permits it to be put on the market when prices are high and oranges scarce. Ripens in May and June, but will hang until August or September and retain its freshness. The fruit is large, round, very juicy and heavy, and of fine flavor. A very fine fruit, and very profitable.

LUE GIM GONG.—Here is an orange that was introduced to the citrus trade in 1912 by the Glen Saint Mary Nursery. It was originated by Mr. Lue Gim Gong

of DeLand, Fla., about 1886. The great thing about this orange is the way it hangs on the tree and still retains its goodness. The fruit is ready to ship in June. It is a little better in July, and still better in August and September. The rainy season, which starts about June 10th and runs till September 1st, does not effect the fruit. It can, therefore, be placed on the market when prices are good. It is a good marketable size and is a good shipper and fine keeper. Very hardy, withstanding an unusual degree of cold for an orange, and a vigorous grower. Size large. Color deep orange. Flesh juicy and sweet, with slightly tart taste. Will hang as long as three years and tree will bear new fruit along with the old.

GRAPEFRUIT

The grapefruit is the aristocrat of the citrus world. It is the one breakfast food of the American table and it is but a matter of the education of the American public when it will be a universal favorite. Its taste is delightful and its effect healthful. It is a very noticeable fact that tourists wintering in Florida, who have previously had but a passing acquaintance with this fruit, soon demand it daily as a breakfast food. Florida is the only country that can produce really acceptable grapefruit, and Florida planters need have no fear of California grapefruit, as it has not met with success in that state.

No other citrus fruit yields as heavily, and its size makes it cheap to handle and market. The tree requires about the same as orange in both soil and root stock. Land should be well drained. If it has a clay subsoil, this should be broken up. Virgin soil should have a crop of velvet beans or cow peas grown on it and this plowed under. This adds greatly in starting the trees off with a good, strong growth.

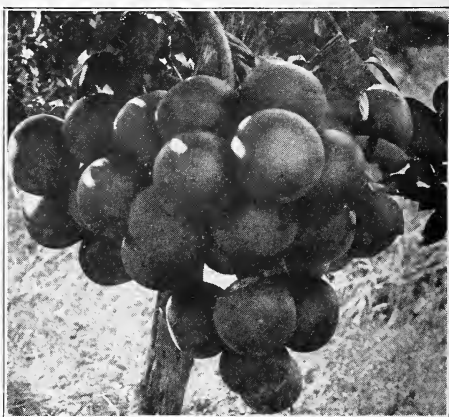
DUNCAN.—Large size with a smooth, tough skin. Of fine quality and has a distinct grapefruit flavor. Bears freely and strong growth. This is one of the hardiest varieties known, and its fine quality makes it a great favorite and one of the most dependable. Will hang on tree until early summer.

SILVER CLUSTER.—This is a nearly round fruit of medium to large size. Grows in large bunches. This is a very fine fruit.

WALTERS.—This is a vigorous grower, bears regularly and a fine producer. Grows in singles, hence branches easily hold the fruit. Ripens in November, but will hang until May. Thin-skinned and fine flavor. This fruit is a great favorite in the market.

EXCELSIOR.—This also grows on single stem. Light yellow in color and has smooth, tough rind. Finely flavored and

a favorite in the markets, as it is a heavy, juicy fruit. This is a very desirable variety to plant.



Silver Cluster Grapefruit

LAKE REGION NURSERY AND FARMS COMPANY

KUMQUATS

This is the smallest of the citrus fruits generally grown in the United States. It really is a bush, growing to as much as 12 feet in height with a great spread of branches of bushy shape. The fruit is a small golden yellow, ripens during fall and winter, about November. This is planted by many as an ornamental and its bright golden fruit against the dark green of the leaves, makes a very beautiful contrast.

NAGAMI.—Fruit oblong, measuring from 1½ to 2 inches long to about 1 inch in diameter. The rind is sweet and of golden yellow; meat is juicy and of spicy flavor and very pleasant. The tree or bush grows to fine spreading head.

LEMONS

The lemon has great possibilities in Florida. California and the Mediterranean countries form our present source of supply. Florida growers have never done much with the lemon, but there is unquestionably a fine field for the commercial growing of lemons in this state, as in no country do they grow or produce better than in Florida.

VILLA FRANCA.—This variety is one of the best and most dependable and a great favorite with good judges of fruit. It is of medium size and smooth; skin thin and fruit is rich in juice. The acid is strong and of the best quality. It is a good shipper and a favorite in the markets.

LIMES

Here is a fruit of wide range in utility. It really can take the place of the lemon and even go a little farther in its adaptability. This is the fruit from which the favorite drink "limeade" is made at the fountains over the country. The flavor is a little different from the lemon, acid not so sharp and has great medicinal qualities.

The lime tree blooms and bears continuously throughout the year. It is, how-



Seed Bed

LAKE REGION NURSERY AND FARMS COMPANY

ever, just a little more tender, but with a little care can easily be brought through to bearing and will withstand some very adverse conditions if given careful tending.

PERSIAN.—Large size, but no larger than medium size lemon. It is smooth and very strong in juice, with a clear, pungent acid. Tree vigorous grower and bears well.

TAHITI.—Large, and looks like lemon. Rind smooth and thin, acid free and strong. This tree rounds its top and attains 12 to 15 feet.

PRICE LIST OF CITRUS FRUIT TREES

ORANGES

Caliper	Each	Per 100	Per 1000
$\frac{1}{2}$ inch or under.....	\$.40	\$35.00	\$300.00
$\frac{1}{2}$ to $\frac{5}{8}$ inch.....	.50	45.00	400.00
$\frac{5}{8}$ to $\frac{3}{4}$ inch.....	.60	55.00	500.00
$\frac{3}{4}$ to $\frac{7}{8}$ inch.....	.70	65.00	600.00
2-year trees, 1 to $1\frac{1}{4}$ inch.....	1.00	95.00	900.00

GRAPEFRUIT

Caliper	Each	Per 100	Per 1000
$\frac{1}{2}$ inch or under.....	\$.40	\$35.00	\$300.00
$\frac{1}{2}$ to $\frac{5}{8}$ inch.....	.50	45.00	400.00
$\frac{5}{8}$ to $\frac{3}{4}$ inch.....	.60	55.00	500.00
$\frac{3}{4}$ to $\frac{7}{8}$ inch.....	.70	65.00	600.00
2-year trees, 1 inch to $1\frac{1}{4}$ inch.....	1.00	95.00	900.00

LIMES, LEMONS, KUMQUATS, TANGERINES

Caliper	Each	Per 100	Per 1000
$\frac{1}{2}$ inch or under.....	\$.40	\$35.00	\$300.00
$\frac{1}{2}$ to $\frac{5}{8}$ inch.....	.50	45.00	400.00
$\frac{5}{8}$ to $\frac{3}{4}$ inch.....	.60	55.00	500.00
$\frac{3}{4}$ to $\frac{7}{8}$ inch.....	.70	65.00	600.00

Our trees are healthy and vigorous. We usually sell by caliper, but owing to varying peculiarities of different classes of trees, this Company reserves the right to sell by caliper or height, but in either case we guarantee satisfaction.

The following figures will apply as to caliper:

- 2-3 feet measures under $\frac{1}{2}$ inch.
- 3-4 feet measures $\frac{1}{2}$ to $\frac{5}{8}$ inch.
- 4-5 feet measures $\frac{5}{8}$ to $\frac{3}{4}$ inch.
- 5-7 feet measures $\frac{3}{4}$ to 1 inch.
- Extra size 1 inch to 2 inches.

GUAVAS

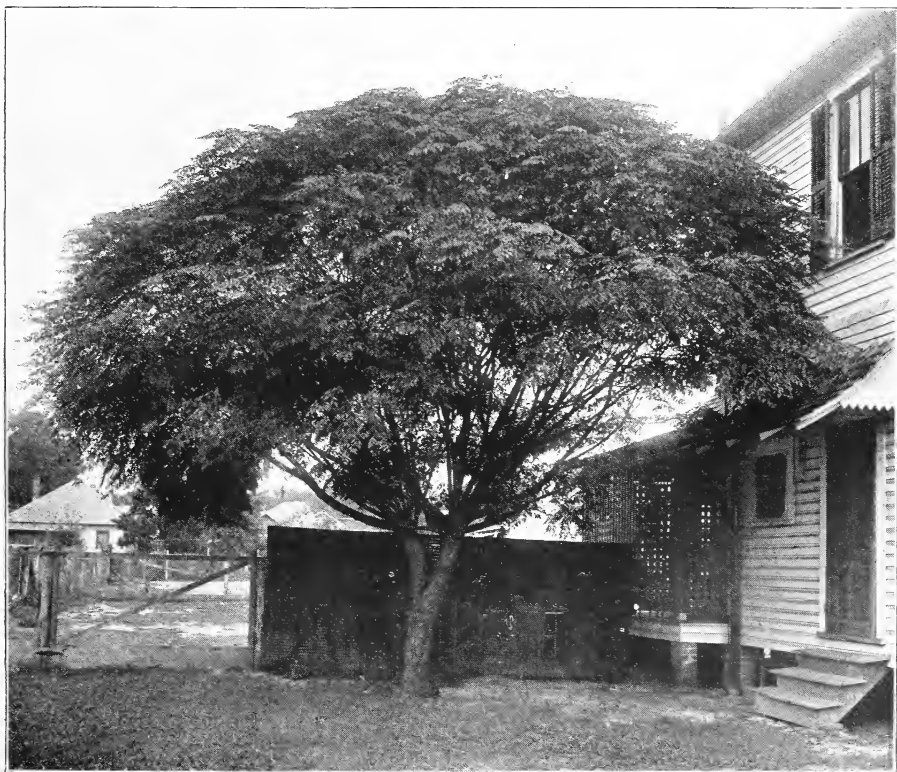
The culture of the guava tree is somewhat like that of the orange. The guava is a sub-tropical fruit, but hardy. The most hardy specie is the Cattley, and of this kind we have two varieties. The bushes are thick, handsome for shrubbery, with thick, bright green, waxy leaves. The guava makes the best possible jelly and as they are very prolific are a source of great profit in this regard. They are ornamental and desirable for the yard.

RED CATTLEY.—An evergreen, with waxy, green leaves and produce large quantities of fruit. Fruit is small and red. Can be grown practically all over the state. 12 to 18 in., 25c each; 18 to 24 in., 40c each.

YELLOW.—Similar to the Red Cattley except the fruit is yellow. It is a very desirable fruit for jellies and preserves and a prolific bearer. 12 to 18 in., 25c each; 18 to 24 in., 40c each.

SURINAM CHERRY

This is really a shrub, although it reaches a height of 20 feet. It is a favorite pot plant, bearing bright green shiny leaves. The fruit much resembles a cherry, is ribbed and runs an inch or more in diameter. The flavor is spicy and slightly acid. Becomes hardy when grown out of doors.



Texas Umbrella Tree

SHADE TREES

TEXAS UMBRELLA TREE.—This is the ideal shade tree. The foliage grows very dense and usually in rounded form. The tree somewhat resembles the locust. Deciduous, but leafy during the summer when the shade is most desired. 2 to 3 ft., 25c; large, 50c.

SOUTHERN MAGNOLIA.—This is an

evergreen tree and one of the finest grown; makes a fine shade and produces a bloom of pure white, very large, and the most pronounced perfume. One tree will scent a whole neighborhood. It is a great treat to northern people to receive a magnolia bloom from the South. Each, 25c and 50c; large, \$1.00.

EUCALYPTUS

This is the Australian gum tree. Very rapid grower and for shade or commercial purposes is of great value. The lumber is very tough and durable but easily worked, and Australia uses this wood in great quantities in building ships and the making of tools. California is growing great areas for lumber.

SWAMP MAHOGANY.—This tree is well adapted to Florida conditions, growing well on drained as well as flat woods land. Thick foliage, large, glossy leaves and is a great spreader, hence fine for

shade. Very rapid grower. Each, 15c; doz., \$1.50; large, 25c.

RED GUM.—Perhaps the most generally planted tree of this type in Florida. Very hardy. Each, 15c; doz., \$1.50; large, 25c.

FLOODED GUM.—This tree will grow on low, wet lands and attains a great height. The lumber from this tree in demand for woodworking purposes. Each, 15c; doz., \$1.50; large, 25c.

ORNAMENTALS

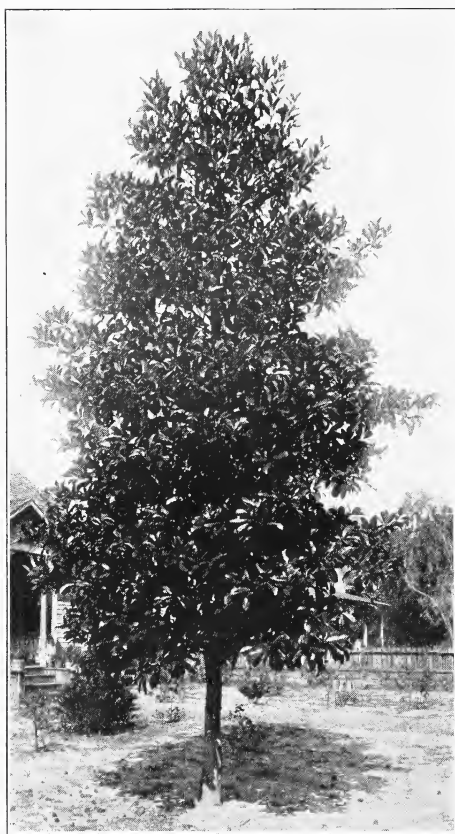
ABELIA GRANDIFLORA.—An evergreen shrub with beautiful white and purple bloom from April to November. Clusters. When bloom subsides leaves turn a beautiful bronze. Fine shrub plant. Price, 35c each; large, 50c.

BOUGAINVILLEA.—Known as Japanese Paper Flower. A fine shrub and blooms almost perpetually, but especially through the winter and spring. Bloom is a bunch of purple flowers. Very ornamental. Price, 35c each.

ACALYPHA.—Green mottled scalloped leaves edged with creamy white. Makes a most gorgeous border. Each, 25c; per doz., \$2.50.

COLEUS.—Border plant, or in singles or groups. The deep red is especially fine. Comes in yellow, red and variegated colors. Each, 10c; per doz., 85c; large, 15c; per doz., \$1.50.

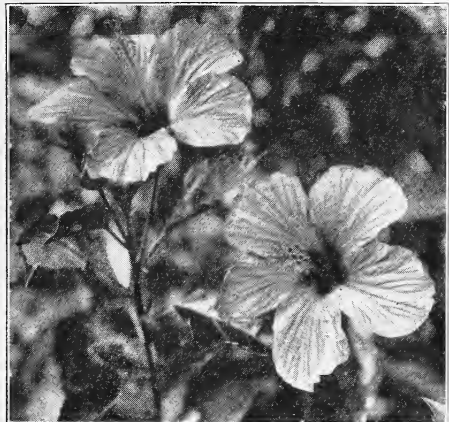
LACE FERN.—Fronds are broad, covered with finely cut round leaves that overlap. Beautiful pot plant. Each, 25c and 35c.



Magnolia Tree

CHINESE HIBISCUS

The most popular flowering shrub in the South. The Chinese Hibiscus is an evergreen, with bright, waxy leaves, and the large bell-shaped blooms, particularly of the deep red, showing against the green of the bush, make a gorgeous sight. They are hardy and grow rapidly, easy to care for, and no home is complete without one or more Hibiscus bushes.



Single Flowering Hibiscus

GRANDIFLORA.—This is the ideal Hibiscus. Large flower of deep crimson and blooms continuously. Each, 15c; doz., \$1.50; large, 25c; doz., \$2.50.

LIGHT PINK.—Same bush but with light pink bloom. Each, 15c; doz., \$1.50; large, 25c; doz., \$2.50.

PEACH BLOW.—This is a double bloom. Flowers very large with base of light crimson shading to pink at the edge. A beautiful plant. Each, 15c; large, 25c.

ROSE OF SHARON, OR ALTHEA.—This is a deciduous plant of the Hibiscus type, blooming in the summer. We have two kinds, the double red, and the pure white, a single bloom of great beauty. Each, 25c; doz., \$2.50.

PHYLLANTHUS.—This plant has a most beautiful leaf, surpassing many of the flowering shrubs and plants. Leaves are variegated, white and pink, and make a fine ornament. This plant retains its beauty throughout the year. Each, 15c; large, 25c.

POINCIANA.—The most gorgeous of all the sights of blooming beauty one may see in Florida is that of a Royal Poinciana tree in bloom. The tree somewhat resembles the locust in appearance and the formation of the leaves, but of finer fiber and much more of an aristo-

crat. From May to August this tree is in bloom, covering the tree with great pyramidal clusters of rich scarlet. It is hardy and grows quickly, but needs care in its early growth. We have the Royal and the Dwarf, the latter carrying a rich array of bloom of light scarlet during the summer. Selected, 25c each; large, 50c.

PLUMBAGO.—This is an evergreen shrub carrying a variegated leaf, and makes a beautiful border or fence, or will make a running, vine-like plant if let grow. 25c each.

POINSETTIA.—This shrub carries a large round bloom, made up of long pointed scarlet leaves radiating from an open center and is one of the most beautiful blooms grown. November till March. Each, 10c; heavy, 20c.

CAPE JASMINE.—An evergreen and a universal favorite. Leaves large and deep, waxy green. The bloom is a double



Camphor Tree

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And ask about the useful premiums we give to new subscribers. The Florida Farmer, the oldest farm magazine in the South, covering all branches of agriculture, including crop raising and live stock raising in a comprehensive and practical manner. It is not issued for the individual or corporate interest, but for the general advancement of the farmer.

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It deals with citrus fruit growing, truck-
ing in a business-like manner. It is strictly an indepen-
dent publication for the purpose of advancing any in-
terests, but stands for good and
the interests of Florida in general.

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3 years	\$2.00

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Florida Farmer and Homeseeker

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LAKE REGION NURSERY AND FARMS COMPANY

flower, white and of great fragrance—the heart-breaking kind. Each, 15c; large, 35c.

CAMPHOR TREE.—This is a non-flowering shrub, producing the camphor gum of commerce. The leaves are small and a glossy green, and grow very thick. Can be used for single shrub, fence or shade. The tree can be grown to enormous size. Can be kept most any size desired by pruning. Can be adapted to more useful purposes than most any tree known. It is about the cleanest plant we know of, as mites and insects will not come near it. It has great commercial value when grown for the camphor gum. In shearing or pruning the tree the leaves and branches are distilled, producing the gum. The foliage extends to the ground. Each, 10c; doz., \$1.00; 2-yr., 20c; doz., \$2.00; 4 to 5 ft., 75c.

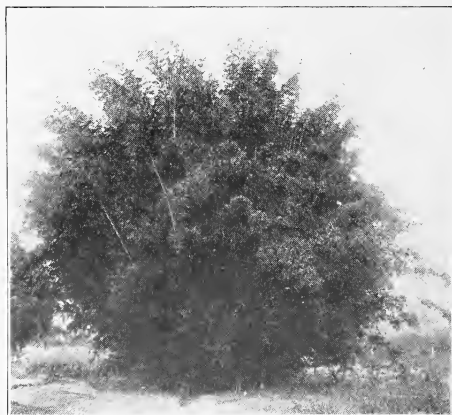
CRAPE MYRTLE.—This is a deciduous shrub with a beautiful summer bloom and with the exception of the white, is very hardy. The blooms are crimson, pink and white. Each is separate. The bloom grows in clusters and the crimson is perhaps the favorite. 1 yr. old, 10c; doz., \$1.00; 2 yr. old, 20c; large, 50c.

OLEANDERS.—This is a flowering shrub of great popularity and grows to great size in Florida. The blooms are produced almost perpetually. They come in separate blooms of red, pink and white. Each, 15c; doz., \$1.50; large, 25c.

VIRGINIA CREEPER.—Perhaps you want a porch or window shaded with an

ornamental vine, and here it is in this old and well-known creeping vine, the Virginia Creeper. They make the most beautiful pergolas and as they grow rapidly, will soon make the desired shade. As the cool weather approaches the leaves turn to the most brilliant shade of yellow and red. The BOSTON IVY is another clinging vine that will attach itself to the smoothest walls, making a dense growth. In the fall leaves turn to bright scarlet. 20c each; large, 40c.

BAMBOO.—This is a Japanese shrub and grows to a height of 35 to 40 feet. Grows in great clumps and wide-spreading tops. Single rooted canes, 15c; doz., \$1.25; clumps, 25c.

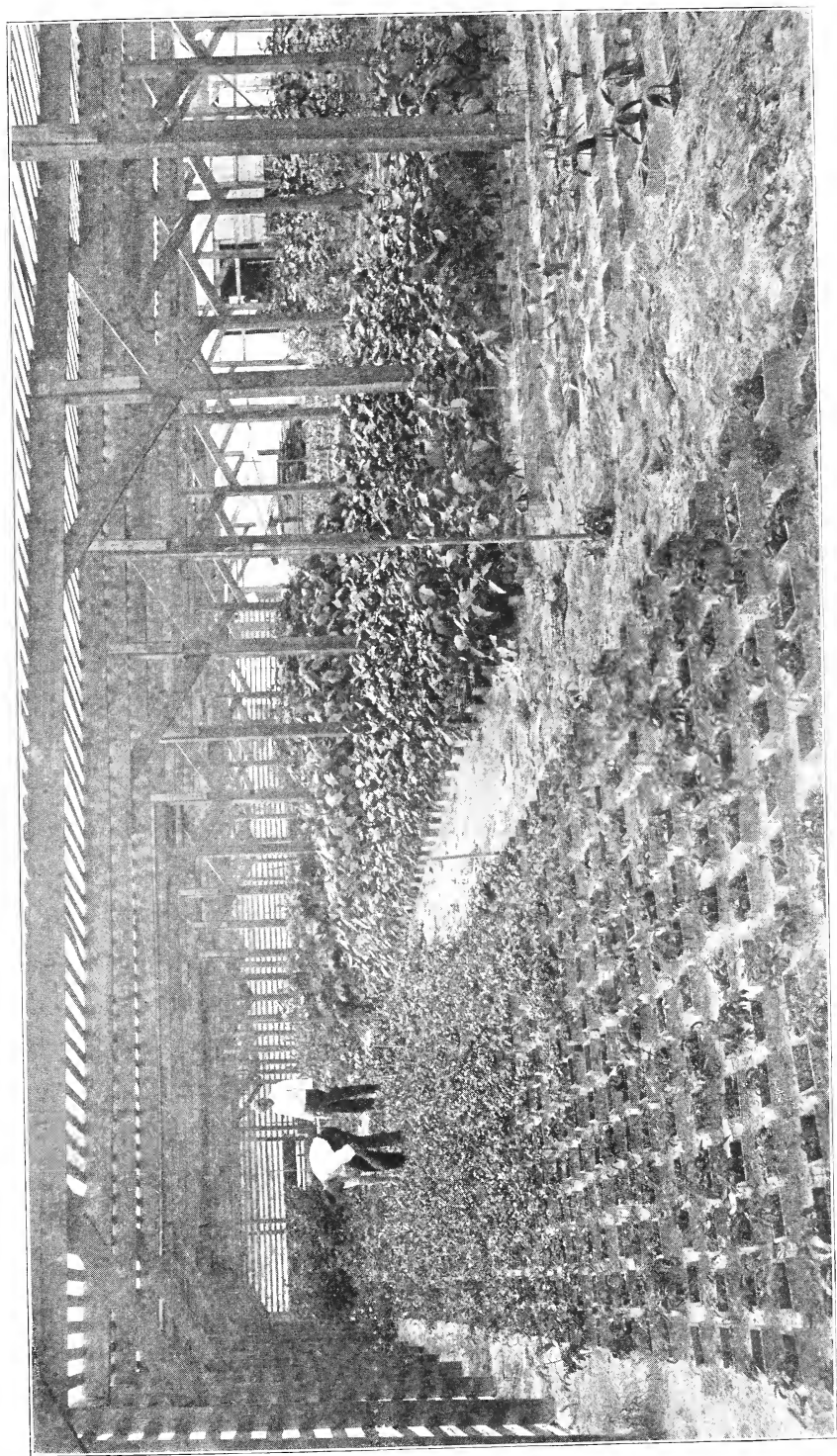


Japanese Bamboo

BERMUDA GRASS

This makes a very pretty and durable lawn. However, the grass should be given a certain lasting quality by the proper fertilizer. Apply tankage carrying about 6 to 6½ per cent. ammonia and 10 to 12 per cent. phosphoric acid. A good top dressing will hasten the growth. Use nitrate of soda at the rate of not less than 50 nor more than 100 pounds per acre.





Greenhouse Ornamentals Lake Region Nursery and Farms Company

LAKE REGION NURSERY AND FARMS COMPANY

HANDBOOK OF VALUABLE INFORMATION TO GROWERS

STATE OFFICERS—FLORIDA

Governor—Park M. Trammell.
Secretary of State—H. Clay Crawford.
Attorney General—Thomas F. West.
Comptroller—W. V. Knott.
State Treasurer—L. C. Luning.
Supt. Public Instruction—W. N. Sheats.
Commissioner of Agriculture—W. A. McRae.
State Chemist—R. E. Rose.
State Geologist—E. H. Sellards.
State Auditor—Ernest Amos.
Adjutant General—J. Clifford R. Foster.
Railroad Commissioners—R. Hudson Burr, N. A. Blich, R. C. Dunn.
Game and Fish Warden—E. Z. Jones.
Florida contains 32 districts.
The Florida Agricultural Experiment Station is located at Gainesville, Fla.

FORAGE CROPS

Winter Crops—Rape, Japanese cane, barley, velvet beans.
Spring Crops—Millet, sorghum, oats, barley.
Summer Crops—Sorghum, cowpeas, corn, Mexican clover, Bermuda grass.
Fall Crops—Peanuts, sweet potatoes, velvet beans, rape, Japanese cane.
Citrus Fruit Planting—October to February.

“Florida is the greatest fruit and vegetable producing section of the United States.”—W. A. McRae, Commissioner of Agriculture.

RAINFALL

January	2.98 inches	August	7.45 inches
February	2.76 “	September	8.17 “
March	2.48 “	October	4.52 “
April	2.00 “	November	1.47 “
May	2.37 “	December	2.28 “
June	7.43 “		
July	6.78 “	Total	52.11 “

Rainy season opens about June 10th, ends Sept. 10th.

PRUNING HINTS FOR THE AMATEUR

Always use sharp tools.
Do not chop limbs.
Always use a ladder; never climb the trees.
Do not allow limbs to touch one another so they will rub.
Prune young trees lightly.
Prune back to healthy wood when cutting out dead limbs.
All large cuts over half an inch should be painted over.
Do not split wood or bark back of cut.
Prune when trees are dormant, or after the new growth has hardened.

Florida soil needs lime to correct acidity.—Lime is a soil tonic and a great aid to fertilizers. It greatly adds to the character of the fruit.

OUR BANK

Does not consider it has rendered you all the service it can render by merely affording a safe place to deposit your funds. We observe the same broad principles any successful business must necessarily observe in serving the public. Come in and talk over the matter of opening an account with us.



Paid-up Capital
\$35,000



First State Bank

WINTER HAVEN, FLORIDA

J. D. PORTER,
President.

W. F. HUTCHINSON,
Cashier.

LAKE REGION NURSERY AND FARMS COMPANY

FLORIDA PRODUCTS

DeLand News: For the year 1914, Florida produced and sold fruits, vegetables, field crops, etc., which brought into the state over \$84,000,000. Among the products were: Six million bushels of corn, worth \$5,500,000. Three hundred and sixty-five thousand bushels of oats, worth \$256,000. (This year's crop is estimated at \$1,300,000.) Two million, seven hundred and sixty-six thousand bushels of sweet potatoes, worth \$2,000,000; 21,000 bushels of rice, \$40,000. Sugar cane syrup, \$1,330,000. Field peas, \$1,000,000. Peanuts, \$2,000,000. Tobacco, \$1,000,000. Wool, \$52,000. Velvet beans and velvet bean hay, \$900,000. Onions, \$102,000. Lettuce, \$603,000. Celery, \$904,000. Green pepper, \$581,000. Irish potatoes, \$2,343,245. Cabbage, \$475,000. Tomatoes, \$5,245,221. Squash, \$61,000. Eggplant, \$217,000. Cucumbers, \$416,000. Watermelons, \$523,000. Cantaloupes, \$221,000. English peas, \$33,000. Beets, \$37,000. Green beans, \$1,328,000. Limes, \$98,000. Lemons, \$55,000. Avocados, \$60,000. Pineapples, \$500,000. Bananas, \$39,000. Mangoes, \$49,000. Guavas, \$59,000. Cocoanuts, \$82,000. Pecans, \$118,000. Figs, \$42,500. Strawberries, \$523,000. Pears, \$143,000. Peaches, \$165,000. Plums, \$24,000. Grapes, \$29,000. Grape wine, \$47,000. Honey, \$104,000. Beeswax, \$3,332. Oranges, \$9,000,000.

Total acreage of crops, year 1913-'14:

Field crops, 1,081,434 acres.

Vegetable and garden products, 93,143 acres.

Total acreage in cultivation, 1,174,847.

Total value of farm products, \$89,937,135, as follows:

Field crops, \$18,861,380.

Vegetable and garden products, \$13,185,904.

Fruit products, \$13,447,435.

Live stock on hand, \$29,541,931.

Poultry and products, \$4,665,001.

Dairy products, \$4,130,925.

Apiary products, 104,550.

Florida ships something from field or stream every day in the year. Florida is never idle. Our lands produce every day in the year. Great is Florida.

NUMBER OF TREES PER ACRE

10 x 10.....	435	30 x 30.....	45
12 x 12.....	302	35 x 35.....	35
15 x 15.....	196	40 x 40.....	27
18 x 18.....	134	45 x 45.....	22
20 x 20.....	108	50 x 50.....	18
25 x 25.....	69		

LEGAL—FLORIDA

That all farm and grove products, and products manufactured therefrom, except intoxicating liquors, wine or beer, shall be exempt from all forms of license tax, State, County and Municipal, where the same is being offered for sale or sold by the farmer or grower producing the said products.

The second Friday in October of each year has been designated as Farmers' Day, and is a legal holiday in this state.

All field boxes to be used in the sale of oranges, grapefruit and lemons by grower to packer or buyer shall be of the uniform size of 12 inches wide, 13 inches high and 33 inches long, and shall contain a partition in middle of not less than $\frac{3}{4}$ of an inch in thickness. Penalty by fine not to exceed \$100 or imprisonment not exceeding six months.

It is legal to kill buzzards. Shoot 'em.

A private bank may be established with \$15,000 capital.

All food offered for sale in the raw state, or which can be consumed without further cooking, must be securely screened.

It is unlawful for any person or persons to drive or operate an automobile in the State of Florida who are at the time intoxicated. Punishable as a misdemeanor.

The Lake Region Nursery and Farms Company

Own 4550 acres lying three miles west of Winter Haven, fully one-half of which is high class muck land, equal to the famous Sanford and Manatee County celery lands. This quality of muck sells for as much as \$1500 per acre. Also 100 acres at the south edge of Winter Haven, where we have our Nursery.

We recently incorporated for \$500,000 and a part of this stock is offered the public at par value of \$50 per share.

Many of our town people who know us and know our lands and plans, have taken stock with us, showing we are not without honor in our own country.

Our President and promoter of the enterprise, Mr. J. D. Porter, established the Lake Region Nursery four years ago, and has worked up a high class of trade by his clean stock and money back proposition. Truck has been successfully grown on some of these lands near the nursery.

It is now proposed to extend the operation in trucking and to establish a herd of thoroughbred dairy cattle and produce dairy products, a crying need in Florida.

If you are interested in securing stock in a Company with the production of staples as an object, that have an instant and constant demand in easily accessible northern markets, we will be glad to mail you prospectus giving full details.

Lake Region Nursery and Farms Co.

WINTER HAVEN, FLORIDA

LAKE REGION NURSERY AND FARMS COMPANY

HISTORICAL AND GEOGRAPHICAL

The territory comprising the State of Florida was purchased from Spain in 1819. The first legislative council for the territory was held at Pensacola in 1822.

Florida was fourteenth in order of admission to the Union.

The greatest length of the state from north to south is about 450 miles. The extreme width across the north portion is about 400 miles, and the length of the peninsula proper is 375 miles. The average width is 95 miles.

Total area is 58,666 square miles, of which a little over 3,800 are occupied by rivers and lakes.

Florida mines an average of 7,000,000 tons of phosphate rock per annum. She has no metallic products. The phosphate is used for fertilizers. In normal times about 60 per cent. of this phosphate goes to Europe. Florida also produces fuller's earth, in fact, about all there is produced in the United States.

Florida is third in her per capita wealth, which the census bureau estimates at \$1,307, being exceeded by Texas and Oklahoma.

The following facts are gleaned from official sources:

Florida's population is 752,619 (1910), a gain of 42 per cent. since 1900. This gain is greater than that of any other state.

The area of cultivatable land in the state is 35,111,040 acres.

Florida has 55,016 farms, of which 36,674 are operated by owners, and 13,342 by tenants—73 per cent. operated by owners and 27 per cent. by tenants.

The value of farms owned by farmers in this state is \$105,948,000; of tenants, \$12,198,000. Value of farm products, \$89,937,135.

Highest average temperature in summer is 96; lowest in winter, 36.

Manufactured products in Florida, \$72,890,000; salaries, \$27,937,000 annually.

Florida's tobacco products annually, \$21,575,000.

Lumber products in the state, \$20,863,000 annually.

Florida has 8,000 growers of citrus fruits, operating 120,000 acres.

Winter Haven postoffice receipts for the year ending June 30, 1915, \$8,506.91.

INSECT PESTS

There are two kinds, Chewing Insects and Sucking Insects. Chewing insects are destroyed by arsenical compounds, with arsenate of lead as a basis. Such poisons are known as poisonous insecticides. Sucking insects are destroyed by sprays made of oils and soaps having a caustic nature.

Spraying must be done thoroughly, and continued until all signs of infection have disappeared.

Trees which have been thoroughly sprayed put on more growth and produce better than those that are not sprayed. The fruit is cleaner and has much better market value.

Sprays are made for each particular infection, and growers must see that they use the particular solution required to get results. Tell your wants to the people who make the sprays and they will advise you.

An acre of land is 160 square rods. A square rod is $16\frac{1}{2} \times 16\frac{1}{2}$ ft. 10 acres would be 40 rods, or 660 feet on each side.

NUMBER OF POUNDS TO BUSHEL

Barley	48	Potatoes	60
Buckwheat	48	Rice	44
Chufas	44	Sorghum	50
Corn 70 ear,	shelled 56	Soy Beans	60
Oats	32	Wheat	60
Onion Sets	32		

SELLING Florida land to new com-
ers regardless of location and quality
of the land, is a memory. To colonize
successfully the settler must be located
where people raise the things he wants
to raise and to see that he is instructed in the right methods
and that his products are marketed at the minimum of cost.
Likewise that his land is suited to the needs for which it
was sold him. His success is necessary to the success of
the community in which he locates. Every failure is a
mistake on the part of some one. The soil, the climate and the markets are here.
It remains to make intelligent application of a few fundamentals well known to the
Florida grower. The misapplication or the failure to apply them, is responsible for
the failure.

The LAKE REGION NURSERY AND FARMS COM-
pany own 4550 acres of land three miles west of Winter Haven, Florida. All
this land has natural drainage, is rich soil, and old and successful farms touch its
borders. Part of this land is offered for sale. The cheapest uncleared land is \$100
per acre or \$125 per acre cleared ready for the plow.

In colonizing this land it is our purpose to see that every
grower or farmer is instructed when and how to grow his crop; to see that his
products are properly and economically marketed and that he makes a success of his
Florida farming. Our customers will not be left to shift for themselves. They
must succeed.

Florida land, well located, is a good investment. Polk
County is in the richest citrus fruit and trucking section of the state, and Winter
Haven is right in the center of that famous "Lake Region" section known all over
Florida. Hence Polk County land stands for good land wherever it is known.

Particulars are given in an interesting booklet which we will be glad to mail to
those interested.

LAKE REGION NURSERY AND FARMS CO.

WINTER HAVEN, FLORIDA

LAKE REGION NURSERY AND FARMS COMPANY

DIRECTIONS FOR PREPARATION OF LIME-SULPHUR CONCENTRATE

The 50-100-50 formula has been generally recommended for the preparation of home-boiled concentrated lime-sulphur solution. The method of preparation is to boil together for 50 minutes to 1 hour 50 pounds of lime, 100 pounds of sulphur, and water to make 50 gallons of the concentrated solution. A good grade of fresh stone lime containing not less than 90 per cent of calcium oxide is necessary for the best results. Hydrated lime is sometimes used, but it is necessary to use a good grade and at least 20 per cent more of this form of lime, as it contains a high percentage of moisture.

Place enough water in the cooking vessel to finish with 50 gallons of the solution. Bring the water to the boiling point, start the agitator, if the plant is equipped with one, then put in the lime and immediately add the sulphur. The mixture should be stirred vigorously either mechanically or by hand until the lime is slaked. Agitation should be continued throughout the time of cooking, which should not exceed one hour. If the solution is to be barreled without filtering, it should be drawn off immediately and allowed to run through a 30-mesh strainer into the barrels. The agitation should continue until all the solution is drawn off, so that there will be an equal distribution of the sludge in the different barrels.

PREPARATION OF HIGHLY CONCENTRATED LIME-SULPHUR SOLUTION

From the experiments above reported, it is evident that a highly concentrated lime-sulphur solution may be made by using the lime and sulphur at the ratio of 1 to 2 as is usually recommended, but with reduced quantities of water. The formula used in the commercial lime-sulphur manufacturing plants visited and also in the foregoing experiments is as follows:

Fresh stone-lime	pounds....	80
Commercial ground sulphur	do.....	160
Water to make the finished product.....	gallons....	50

While there is about 50 per cent. in volume of sludge after allowing this solution to settle for 24 hours, there is only about 5 to 10 per cent. in volume of insoluble materials. These consist of sulphites, free lime, free sulphur, magnesium compounds, etc., varying with the kind of lime used and other conditions. Solutions prepared by this formula should test on an average 33° to 34° Baumé.

RELATIVE COST

Commercial ground sulphur can be bought in car lots for about \$1.50 per hundred pounds, and lime at about 60 cents per barrel. At these prices the highly concentrated solution can be made at the following cost per barrel:

80 pounds lime at 60 cents per barrel.....	\$0.20
160 pounds sulphur at \$1.50 per hundred weight.....	2.40
Labor and fuel, estimated.....	.70

Total cost per barrel of 50 gallons.....\$3.30

This does not include interest and wear on outfit, and cost of containers for storing. At the foregoing prices of ingredients the high-test concentrate would cost about 98 cents more per barrel than the lower-test concentrate made by the 50-100-50 formula.

SPRAYING SCHEME FOR THE CONTROL OF INSECT PESTS ON CITRUS TREES IN FLORIDA.

By W. W. YOTHERS, Bureau of Entomology, Orlando, Florida.

Of the total damage caused by insects to citrus in Florida more than 95 per cent. may be attributed to six species. The most destructive is the citrus white fly (*Dialeurodes citri* R. & H.) which now infests nearly all the groves in the state. The second most destructive pest is the purple scale (*Lepidosaphes beckii* Newm.) which is found in greater or less numbers on every citrus tree in the state. According to

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WINTER HAVEN, FLA.

S E E D

HIGH GRADE SEED BOUGHT AND SOLD

DEALERS IN

SOUTH GEORGIA AND FLORIDA GROWN SEED
RYE, SOUTHERN SEED WHEAT, BURR
AND CRIMSON CLOVER, WIN-
TER VETCH, GRASS
SEED, SEED PEA-
NUTS AND
CHUFAS.

GROWERS OF

WATERMELON SEED, VELVET BEAN SEED,
SOUTHERN WINTER PEA.

HAILE'S SEED STORE

Monticello, Florida

CORRESPONDENCE SOLICITED

LAKE REGION NURSERY AND FARMS COMPANY

my observations the rust mite (*Eriophyes oleivorus* Ashm.) ranks third. The Florida red scale (*Chrysomphalus aonidium* L.), the cloudy-winged white fly (*Aleyrodes nubilifera* Berger, now known as *Dialeurodes citrifolii* Morgan) and the red spider (*Tetranychus sexmaculatus* Riley) are also of primary importance. It has been the object for several years to perfect a spraying scheme which would largely eliminate the damage caused by these pests. There are also several pests of secondary importance such as the woolly white fly (*Aleurothrixus bowardi* Q.) and the purple mite (*Tetranychus mytilaspidis* Riley), which this spraying scheme will also partially or completely control.

As a general proposition the time to spray for the control of all pests on citrus trees is when they are present in such numbers that, if left to reproduce without artificial hindrance they would soon become injurious. In other words, the pests should be killed before they do much damage to either the tree or fruit. The pests should always be kept in such a state of subjection as to do little or no damage. In case the various pests to citrus trees are permitted to become so abundant as to cause damage, the profits which might be derived from artificial treatment, such as spraying with an insecticide, are, to a certain extent, lost. The life history and habits of nearly all pests on citrus trees are, fortunately, such that good and satisfactory results can be obtained any time the spray is applied. While such is the case there are times when it is opportune to spray. These periods come when the largest percentage of the insects is in the youngest stage, which is the one most easily killed.

The following spraying scheme has been used quite extensively for three summers and has generally given satisfactory results. It must be admitted, however, that no hard and fast scheme can be given, and the number of sprayings depends to a large extent on the thoroughness of the work.

I. Paraffin-Oil Emulsions; Government Formula 1-50 or 1 per cent. of Oil—May. The main object of spraying at this time is to kill the white fly, scale insects, and to a large extent rust mites, although this treatment must not be relied upon to control the last. This spraying should be given after the adults of the first brood of white flies have disappeared and before the appearance of those of the second brood. The fruit should be an inch or more in diameter when the spraying is done. This treatment should be given before the beginning of the rainy season, so that the beneficial fungi will take care of those insects which are not killed by the spray.

II. Lime-Sulphur Solution 32° Baumé 1-50 to 1-75—June to July. The main object of this treatment is to kill rust mites and the opportune time for its application varies with the appearance of the maximum number of the rust mites. It should be applied before the mites get very abundant and before any russetting appears. It will also kill some scales and white flies, but is of little value for that purpose.

III. Paraffin-Oil Emulsions; Government Formula 1-50 or 1 per cent. of Oil—August 25 to October 31. This is the second spraying for the white fly and scale insects. The object of spraying at this time is to kill all the white fly larvae which are the progeny of the third and last brood. It is this brood which causes nearly all the damage from the white flies, and the earlier they are killed the better it is for the tree. This spraying also comes after all the beneficial fungi have done their work. This will also remove the sooty mold from the trees and sufficiently from the fruit to permit the sun to color it up. Soda-sulphur 1-50 may be added to this spraying and this will increase its effectiveness in killing rust mites.

IV. Lime-Sulphur Solution 32° Baumé 1-50 to 1-75—November or December. The object of this spraying is to kill rust mites and it may or may not be necessary, depending on the abundance of the mites.

It may be necessary to spray for rust mites before No. 1 is given. In case the red spider becomes abundant enough to be injurious a spraying with lime-sulphur solution should be given. It may also be necessary to spray three times with the oil sprays, in which case this treatment can be given in midsummer or in winter. If the red scale is very abundant, two sprayings with the oil emulsions should be given at intervals of about a month.

The paraffin-oil emulsion may be made according to directions given in Circular No. 168, Bureau of Entomology. In addition to the above there are two miscible oils on the market in Florida which are highly satisfactory. The soda-sulphur solution is made according to the standard formula, 30 lbs. sulphur, 20 lbs. caustic soda, 20 gallons of water. This tests about 16° Baumé and may be used 1-40 instead of lime-sulphur solution, but it is not so effective in controlling rust mites. It has the advantage of the lime-sulphur solution in that it will mix with the oil emulsions. To

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Cheerfully Given**

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**Live Oak Limestone
Company**

**Sales Office
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follow the above scheme it will cost from 20c to 35c a year per tree. It cost one grower 20c for trees of about five-box capacity, or 4c per box. Another did the work for 32c for eight-box trees, or 4c per box. It cost several other growers 3, 3, 6, 7, and 8c per box, respectively. A maximum figure would be 8c per box.

Even though this scheme is not strictly adhered to it will result in raising the grade of the fruit. The second grade will become first, the third will be largely eliminated, and the culls will almost disappear. The increase of production due to the increase in size of the fruit resulting from the elimination of the rust mite will be from 12½ to 25 per cent., amounting approximately to two million boxes. The devitalizing of the trees by the insects would be eliminated and the trees would then expend their vitality to produce fruit instead of nourishing insects. This would also increase the quantity and quality of the fruit and make a crop more certain from year to year, which would be crop insurance. It is a conservative estimate that the total benefits which would be derived if this scheme was followed throughout the state would be not far from an increase of production of a minimum of 25 per cent. over that which is the result at the present time of the total dependence on the beneficial parasitic fungi. The appearance of the fruit on the market would be vastly improved. The total dependence of the Florida citrus grower on natural enemies for the control of the pests on citrus trees is a delusion.

INSECTICIDE FOR SCALE AND FLY

A paraffin-oil emulsion is used, prepared in accordance with the formula described in Bureau of Entomology Circular 168. Following is the formula:

Whale oil soap, 8 pounds or 1 gallon,
Paraffin oil, 2 gallons,
Water, 1 gallon.

The mixture is prepared by adding the oil very slowly to the soap, the whole being vigorously stirred throughout the process. It is important that the oil should be added in small quantities and the stirring be sufficient to keep oil and soap in the form of an emulsion. After the required amount of oil has been added and after free oil has ceased to appear on top of the soap, the water is slowly poured in. After being prepared in this way the mixture is diluted by the addition of 50 gallons of water to 1 of mixture, which leaves a spray approximately 1 per cent. oil. This is the maximum strength required for white flies and purple scale.

BOILED FORMULA.

Paraffin oil	2 gal.
{ Caustic potash, fish oil soap	2 lbs.
{ or Octagon soap.....	2 bars
Water	1 gal.

This will make sufficient insecticide for 200 gallons of spray material. Cost about 45c.

DIRECTIONS:

Put all the materials into a kettle and bring to the boiling point, when the mixture can be emulsified with a force pump.

INSECTICIDE FOR RUST MITES AND RED SPIDERS

The so-called 50-100-50 formula, composed of 50 pounds of lime, 100 pounds of sulphur, and water to make 50 gallons, has been generally recommended for the preparation of a home-made concentrated lime-sulphur solution. Some advise the use of five or six pounds of sulphur more than above stated in order to have a slight excess of this ingredient over the lime. The method of preparation is to boil together in the necessary water the respective ingredients for from 50 minutes to an hour. A good grade of fresh stone lime containing not less than 90 per cent. of calcium oxide

DON'T BLAME THE NURSEYMAN

if your grove does not yield. Listen—three things are of primary importance in planting citrus trees—soil, climate and trees. Use good judgment in selecting the location, so the trees will be set in ideal surroundings. Nothing will overcome unsuitable conditions. Good trees must be procured, prepare the soil well, plough deeply, pulverize thoroughly, apply and harrow in some form of

LIME.

Lime is a soil tonic; it sweetens the soil, corrects acidity, aids fertilizers, promotes the growth of desirable bacteria; it makes a better fruit, a better grade and more of it. Lime is one of the essentials. We make a specialty of lime for citrus groves. Use Meffert's Trowel Brand Lime; it is highest in quality, analysis and real profit to the user. Write us for prices, samples and our booklet—"Using Lime on Citrus Groves"—it is free.

The Florida Lime Company
OCALA, FLORIDA

An Old and Reliable Concern

LAKE REGION NURSERY AND FARMS COMPANY

is necessary for the best results. Hydrated lime is sometimes used, but it is necessary to use a good grade and at least 20 per cent. more of this form of lime is required, as it contains a high percentage of moisture.

Place enough water in the cooking vessel to finish with 50 gallons of the solution: bring the water to the boiling point, then put in the lime and immediately add the sulphur. If the plant is equipped with an agitator, this should be started with the addition of lime and sulphur. If there is no mechanical agitator, the mixture must be stirred vigorously by hand until the lime is slaked, and necessary agitation must be given throughout the time of cooking. If the solution is to be put in barrels without filtering, it should be drawn off as soon as the period of cooking is completed, and allowed to run through a 30-mesh strainer into the barrels. The agitation should be continued while the solution is being drawn off so that there will be an equal distribution of the sludge in the different storage receptacles.

The density of the concentrate, made according to the formula 50-100-50, has varied, in the experience of the Bureau of Entomology, from 24 to 28 degrees Baumé, and theoretically should be 26° by this scale. It is quite desirable for economy in storage space to prepare as highly concentrated a solution as possible. This can be done with reduced quantity of water after the following formula, which will give a solution of a density of from 32 to 34 degrees Baumé.

Fresh stone lime	pounds....	80
Commercial ground sulphur	do.....	160
Water to make the finished product	gallons....	50

While this formula gives about 50 per cent. in volume of sludge, after allowing the solution to settle for 24 hours, there is only about 5 to 10 per cent. in volume of insoluble material, which would be removed in the straining process. This volume of sludge will not be objectionable in spraying, provided the insoluble material has been properly strained out.





The Campbell Turbo Irrigator

Solves the Problem of
Orchard Irrigation

PLACED on permanent stand pipes sufficiently tall to extend through and above trees, and attached to underground pipe system supplied with water under proper pressure, this wonderful machine will thoroughly and perfectly irrigate an area up to 100 ft. in diameter, and at this maximum distance requires an average of less than five stands per acre.

In operation, water under pressure passes through the machine, causing the inclosed turbine to revolve and transmits power to the gearing that operates the discharge nozzle, raising it from a 45 degree to an almost vertical position, and at the same time slowly revolves the entire machine around its axis. In other words it accomplishes the same results that can be obtained by anyone raising and lowering a small fire nozzle, at the same time turning around very slowly, but the peculiar motion transmitted to the nozzle breaks the stream into fine drops, thus obtaining results incomparably superior to what could be obtained in the manner suggested.

By reason of the immense area covered, very little pipe and other material is required in its installation, which means that the most perfect irrigation, at small expense, is now possible for every progressive horticulturist.

J. P. CAMPBELL

JACKSONVILLE, FLORIDA

Largest stock Gas Engines, Power Pumps and Supplies in the South. Manufacturer Modern Fruit Packing-house Machinery and Campbell Irrigation Equipment.